

**REMARKS*****Summary of the Amendment***

Upon consideration of the instant response, claims 1 – 33 will remain pending and under consideration by the Examiner.

***Summary of the Official Action***

In the instant Office Action, the Examiner has rejected claims 1 – 33 over the art of record. By the present remarks, Applicants submit that the rejections have been overcome, and respectfully request reconsideration of the outstanding Office Action and allowance of the present application.

***Traversal of Rejection Under 35 U.S.C. §102(e) or 35 U.S.C. §103(a)******1. Over Edwards***

Applicants traverse the rejection of claims 1 – 4, 7 – 21, and 27 – 32 under 35 U.S.C. §102(e) as being anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as being unpatentable over EDWARDS (U.S. Patent No. 6,248,210). The Examiner asserts that EDWARDS discloses a process for pressing and dewatering a fibrous web, in which a nip pressure profile is optimized on a shoe press on a Yankee cylinder. The Examiner asserts that Figure 3 shows a shoe press length of 50 mm (with peak pressure of 4,500 kN/m<sup>2</sup> (4.5 MPa)) – 120 mm (with peak pressure of 1,500 kN/m<sup>2</sup> (1.5 MPa)), and that Figure 12 shows line load data for these shoes ranging from 87.5 kN/m – 250 kN/m. Thus, the Examiner asserts that EDWARDS shows the recited features of the invention, and, with regard to peak pressures, that it would have been obvious to modify EDWARDS to optimize the operating

parameters. Applicants traverse the Examiner's assertions.

Applicants' independent claim 1 recites, *inter alia*, a shoe pressing unit and a Yankee drying cylinder arranged to form at least one press nip having a length in a web travel direction greater than approximately 80 mm, and having a pressure profile which results over the press nip length with a maximum pressing pressure which is less than or equal to approximately 2 MPa. Applicants submit that EDWARDS fails to anticipate or render unpatentable at least the above-noted combination of features.

While Applicants acknowledge that Figure 3 of EDWARDS discloses various pressure profiles for various press shoe lengths, Applicants further note that EDWARDS considers the "typical shoe press" to be ill-suited for use in the disclosed method and apparatus. In fact, as disclosed in EDWARDS,

[s]ince the press nip for low weight tissue and towel grades is pressure controlled, the very low peak pressure could cause a decrease in post press dryness, ultimately causing a loss in production. The counter roll in a conventional shoe press is smaller by comparison to the diameter of a Yankee dryer. As a result, the use of a conventional shoe shape would make it very difficult to remove the felt/fabric from the sheet at the nip exit. Therefore, conventional shoes shapes and conventional felt/fabric takeoff angles would exacerbate rewet for low weight absorbent products.

Column 5, lines 55 – 65.

Because this typical shoe press is not appropriately suited for the purpose intended by

EDWARDS, Applicants note that EDWARDS fails to provide any teaching of using the typical press shoe in the disclosed apparatus, such that the recited combination of features are not taught by EDWARDS. While the individual elements may arguably be discussed in the EDWARDS document, Applicants submit that this document fails to expressly or impliedly disclose a single embodiment that includes the combination of features recited in at least independent claim 1.

Thus, Applicants submit that EDWARDS fails to anticipate the instant invention as recited in at least independent claim 1.

Further, as EDWARDS expressly discloses that the typical shoe press would not produce the steep, sharp pressure gradient required by the EDWARDS process and apparatus.

Because EDWARDS expressly teaches against modifying their invention to include a typical shoe press, Applicants submit that it would not have been obvious to modify EDWARDS in any manner that would render unpatentable the invention recited in at least independent claim

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Therefore, Applicants request that the Examiner reconsider and withdraw the rejections under 35 U.S.C. §102(e) and 35 U.S.C. §103(a) and indicate that the instant invention is allowable.

Further, Applicant submits that claims 2 – 4, 7 – 21, and 27 – 32 are allowable at least for the reason that these claims depend from allowable base claims and because these claims recite additional features that further define the present invention. In particular, Applicant submits that EDWARDS fails to anticipate or render unpatentable the combination of

features recited in the above-noted claims.

Accordingly, Applicants request that the Examiner reconsider and withdraw the rejection of claims 1 – 4, 7 – 21, and 27 – 32 under 35 U.S.C. §102(e) or 35 U.S.C. §103(a) and indicate that these claims are allowable.

2. Over Schiel

Applicants traverse the rejection of claims 1 – 4, 7, 8, 16 – 18, 21, and 24 – 28 under 35 U.S.C. §102(e) as anticipated by or, in the alternative, under 35 U.S.C. §103(a) as being unpatentable over SCHIEL (U.S. Patent No. 6,004,429). The Examiner asserts that, as SCHIEL discloses press shoes having a length of between 50 – 120 mm and a maximum pressing pressure of between 2.5 – 5 MPa, it would have been obvious (if not inherently provided) that the apparatus is capable of being operated at a maximum of 2 MPa. Applicants traverse the Examiner's assertions.

Applicants submit that it is not whether SCHIEL is capable of being operated in a manner that would anticipate or render unpatentable the instant invention, but whether the SCHIEL teaches or suggests the features recited in at least independent claim 1. In this regard, Applicants submit that the express disclosure of SCHIEL teaches operating the apparatus outside of the range recited in at least independent claim 1. Moreover, Applicants submit that SCHIEL fails to teach or suggest whether operation of this apparatus outside of the desire pressure range of 2.5 – 5 MPa would allow the apparatus to operate in its intended manner.

Thus, Applicants submit that SCHIEL fails to anticipate the invention recited in at

least independent claim 1, and fails to provide any suggestion of modifying the apparatus in any manner that would render the invention recited in at least independent claim 1 unpatentable. In this regard, Applicants note that for SCHIEL to render obvious the instant invention, it would be necessary for this document to suggest reducing the lowest maximum pressure of the disclosed range by 20%, and to suggest that such a reduced maximum pressure would allow the apparatus to operate as desired. Applicants note that no such disclosure is provide in SCHIEL.

Further, Applicant submits that claims 2 – 4, 7, 8, 16 – 18, 21, and 24 – 28 are allowable at least for the reason that these claims depend from allowable base claims and because these claims recite additional features that further define the present invention. In particular, Applicant submits that SCHIEL fails to anticipate or render unpatentable the combination of features recited in the above-noted claims.

Accordingly, Applicants request that the Examiner reconsider and withdraw the rejection of claims 1 – 4, 7, 8, 16 – 18, 21, and 24 – 28 under 35 U.S.C. §102(e) or 35 U.S.C. §103(a) and indicate that these claims are allowable.

***Traversal of Rejection Under 35 U.S.C. §103(a)***

*1.     Over Edwards in view of Laapotti*

Applicants traverse the rejection of claims 5 and 6 under 35 U.S.C. §103(a) as being unpatentable over EDWARDS in view of LAAPOTTI (U.S. Patent No. 5,043,046). The Examiner asserts that, while EDWARDS fails to disclose a plurality of press elements, LAAPOTTI shows such a feature. Applicants traverse the Examiner's assertions.

Applicants note that LAAPOTTI fails to provide any teaching or suggestion for modifying EDWARDS in a manner contrary to the express disclosure of EDWARDS. That is, as EDWARDS expressly discloses that a typical press shoe should not be used as part of the apparatus, Applicants submit that LAAPOTTI fails to provide any teaching or suggestion that would have made it obvious to one ordinarily skilled in the art to modify EDWARDS to include such a press shoe.

Because the art of record expressly teaches against any modification of EDWARDS that would render unpatentable the instant invention, Applicants submit that the asserted combination of EDWARDS and LAAPOTTI fails to render obvious the instant invention.

Further, Applicant submits that claims 5 and 6 are allowable at least for the reason that these claims depend from allowable base claims and because these claims recite additional features that further define the present invention. In particular, Applicant submits that no proper combination of EDWARDS and LAAPOTTI teaches or suggests the combination of features recited in the above-noted claims.

Accordingly, Applicants request that the Examiner reconsider and withdraw the rejection of claims 5 and 6 35 U.S.C. §103(a) and indicate that these claims are allowable.

2. Over Edwards in view of Bluhm

Applicants traverse the rejection of claims 22 and 23 under 35 U.S.C. §103(a) as being unpatentable over EDWARDS in view of BLUHM et al. (U.S. Patent No. 5,556,511) [hereinafter “BLUHM”] and TAPIO et al. (U.S. Patent No. 4,139,410) [hereinafter “TAPIO”]. The Examiner asserts that, while EDWARDS fails to disclose a plurality of press

nips, BLUHM and TAPIO disclose such a feature and it would have been obvious to modify EDWARDS in view of this teaching of BLUHM and TAPIO. Applicants traverse the Examiner's assertions.

Applicants note that BLUHM and TAPIO fail to provide any teaching or suggestion for modifying EDWARDS in a manner contrary to the express disclosure of EDWARDS. That is, as EDWARDS expressly discloses that a typical press shoe should not be used as part of the apparatus, Applicants submit that BLUHM and TAPIO fail to provide any teaching or suggestion that would have made it obvious to one ordinarily skilled in the art to modify EDWARDS to include such a press shoe.

Because the art of record expressly teaches against any modification of EDWARDS that would render unpatentable the instant invention, Applicants submit that the asserted combination of EDWARDS, BLUHM and TAPIO fails to render obvious the instant invention.

Further, Applicant submits that claims 22 and 23 are allowable at least for the reason that these claims depend from allowable base claims and because these claims recite additional features that further define the present invention. In particular, Applicant submits that no proper combination of EDWARDS, BLUHM and TAPIO teaches or suggests the combination of features recited in the above-noted claims.

Accordingly, Applicants request that the Examiner reconsider and withdraw the rejection of claims 22 and 23 35 U.S.C. §103(a) and indicate that these claims are allowable.

3. Over Edwards in view of Sauer

Applicants traverse the rejection of claim 33 under 35 U.S.C. §103(a) as being unpatentable over EDWARDS in view of SAUER (U.S. Patent No. 5,019,211). The Examiner asserts that, while EDWARDS fails to disclose a web having curled fibers, SAUER discloses that the use of such fibers is well known, such that it would have been obvious to modify EDWARDS in view of SAUER. Applicants traverse the Examiner's assertions.

Applicants note that SAUER fails to provide any teaching or suggestion for modifying EDWARDS in a manner contrary to the express disclosure of EDWARDS. That is, as EDWARDS expressly discloses that a typical press shoe should not be used as part of the apparatus, Applicants submit that SAUER fails to provide any teaching or suggestion that would have made it obvious to one ordinarily skilled in the art to modify EDWARDS to include such a press shoe.

Because the art of record expressly teaches against any modification of EDWARDS that would render unpatentable the instant invention, Applicants submit that the asserted combination of EDWARDS and SAUER fails to render obvious the instant invention.

Further, Applicant submits that claim 33 is allowable at least for the reason that it depends from allowable base claims and because it recites additional features that further define the present invention. In particular, Applicant submits that no proper combination of EDWARDS and SAUER teaches or suggests the combination of features recited in the above-noted claim.

Accordingly, Applicants request that the Examiner reconsider and withdraw the



rejection of claim 33 under 35 U.S.C. §103(a) and indicate that this claim is allowable.

***Application is Allowable***

Thus, Applicants respectfully submit that each and every pending claim of the present invention meets the requirements for patentability under 35 U.S.C. §§ 102 and 103, and respectfully request the Examiner to indicate allowance of each and every pending claim of the present invention.

***Authorization to Charge Deposit Account***

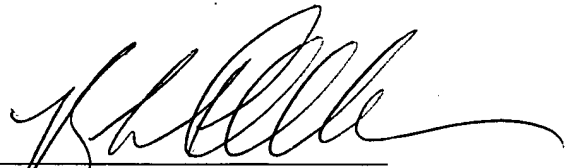

The undersigned authorizes the charging of any necessary fees, including any extensions of time fees required to place the application in condition for allowance by Examiner's Amendment, to Deposit Account No. 19 - 0089 in order to maintain pendency of this application.

**CONCLUSION**

In view of the foregoing, it is submitted that none of the references of record, either taken alone or in any proper combination thereof, anticipate or render obvious the Applicants' invention, as recited in each of claims 1 – 33. The applied references of record have been discussed and distinguished, while significant claimed features of the present invention have been pointed out.

Accordingly, reconsideration of the outstanding Office Action and allowance of the present application and all the claims therein are respectfully requested and now believed to be appropriate.

Respectfully submitted,  
Thomas Thoroe SCHERB et al.

  
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